

less pronounced, for the limb may become partially fixed. This did occur in one of my cases.¹⁰

Without a postmortem examination it would seem uncertain whether a positive differential diagnosis would be entirely justified for the only sign that has not been described in literature as common to both these diseases seems to be the curious brownish discoloration of the skin and pigmentation of the cornea that were observed by Fleischer,¹¹ Völsch,¹² and Holloway.¹³

Stöcker¹⁴ has recorded a case of progressive lenticular degeneration in which he found lesions in the lenticular nucleus which he believed to be characteristic of that condition, but, in addition, he found distinct alterations of the glia elements in all parts of the central nervous system except in the cerebellum, and he directs attention to the analogy that exists between progressive lenticular degeneration and the pseudosclerosis of Westphal and Strümpell.

On the other hand the cases of typical pseudosclerosis of Alzheimer and Hösslin¹⁵ and A. Westphal¹⁶ revealed not only the characteristic changes in the glia tissue in various parts of the brain, but these observers state that these alterations were most marked in the corpus striatum and the optic thalamus.

Considering both the clinical and the pathological evidence now at our disposal, even though this is somewhat limited, it would seem not at all unlikely that, in the near future, pseudosclerosis and progressive lenticular degeneration may be proved to be merely modifications of the one disease. At all events the cases of Stöcker, A. Westphal, and Hösslin and Alzheimer appear to justify the opinion that, on purely clinical grounds, a differentiation is not possible.

VALUE OF RECTAL FEEDING.¹

BY HARRY ADLER, M.D.,

PROFESSOR OF CLINICAL MEDICINE, UNIVERSITY OF MARYLAND, BALTIMORE.

EVERYONE having experience with rectal feeding by the introduction of a pint or more of liquid nourishment at a time, is impressed with the discomfort and difficulties of continued nutrition by this means.

¹⁰ Jour. Amer. Med. Assn., January 31, 1915.

¹¹ Deutsch. Ztschr. f. Nervenhe., 1912, xl, 3.

¹² AMER. JOURN. MED. SCI., 1914, cxlviii, 235.

¹³ Ztschr. f. d. ges. Neurol. u. Psychiat., 1914, xxv, 217.

¹⁴ Ibid., 1912, viii.

¹⁵ Arch. f. Psychiat., 1913, li.

¹⁶ Read at a meeting of the American Gastroenterological Association, May 15, 1915.

¹² Loc. cit.

An examination of stools shows how little food is really absorbed. On this account, for the past four years, I have been using the drop method as first introduced by Murphy for saline solution.

Four to eight ounces of peptonized milk with one pint of 4 per cent. sugar solution has been given three times daily. This method can be kept up for two weeks without discomfort. In a few cases they have caused cramp-like pains for the first day or two. In one or two cases vomiting has been produced. In but one case has it been necessary to give up the rectal feeding.

That the nourishment is carried well up to the intestines is shown by our experience in a case of fecal fistula after an appendix operation.

The patient was unable to retain any food by mouth, and rectal drop feeding was attempted. The dressings became invariably soaked with the enema after a few hours, showing that the fluid had made its way without difficulty through the length of the colon.

With rectal enemas of bismuth suspension there is no difficulty in obtaining a complete picture of the colon, but bismuth never enters the ileum except in the unusual cases of patent ileocecal valve.

With the drop method the same results were observed; no bismuth passed into the ileum.

In order to obtain some idea of absorption of rectal feedings by the Murphy method, metabolism investigations were made on cases of gastric and duodenal ulcer with no abnormality of nutrition. After the second day of artificial feeding, with nothing by mouth, the colonic intakes for four to six days in nitrogen was compared with the output in the urine and the return loss per rectum. Daily total nitrogen estimations of the urine were made while all the matter passed per rectum in the same period was collected, dried to constant weight, and the total estimated by the Kjeldahl method.

CASE I.

Day.	Nitrogen intake.	Amount e.e.	Urine.	Output T. N.	Stool.
3	1.95	11.25		11.82	0.78
4	1.95	7.00		9.79	0.78
5	1.95	13.80		11.72	0.78
6	1.95	10.10		12.19	0.78
7	1.95	16.00		12.12	0.78
	9.75			57.64	3.90
Total output				3.90	
				61.50	
	Intake			9.75	
	Body loss in nitrogen			51.79	

CASE II.—Gastric ulcer.

Day.	Nitrogen intake.	Amount c.c.	Urine.	Total nitrogen.	Amount from feeding.
3	1.95 gm.	10.75		12.82	1.39
4	1.95	9.05		12.01	1.39
5	1.95	8.00		11.15	1.39
6	1.95	8.25		10.20	1.39
7	1.95	8.50		9.63	1.39
	9.75 total nitrogen			66.81 urine 6.95 stool	6.95
				72.76 total nitrogen lost	
	Intake			9.75	
	Body loss in nitrogen			63.01 in five days	

CASE III.—Gastric ulcer (?).

Day.	Nitrogen intake.	Amount c.c.	Urine.	Total nitrogen.	Amount from feeding.
3	1.95	9.80		10.09	0.91
4	1.95	8.40		9.42	0.91
5	1.95	9.20		9.61	0.91
6	1.95	8.70		8.72	0.91
	8.80			37.84 3.64	3.64
				41.48	
	Intake			8.80	
	Body loss in nitrogen			32.68 in four days.	

CASE IV.—Duodenal ulcer.

Day.	Nitrogen intake.	Amount c.c.	Urine.	Total nitrogen.	Amount from feeding.
3	3.90	8.20		11.05	2.06
4	3.90	7.35		10.97	2.06
5	3.90	9.10		11.26	2.06
6	3.90	8.45		9.86	2.06
7	3.90	8.20		9.32	2.06
8	3.90	7.80		9.09	2.06
	23.40			71.55 12.36	12.36
				83.91	
	Intake			23.40	
	Body loss in nitrogen			60.51 in six days.	

CASE V.—Duodenal ulcer.

Day.	Nitrogen intake.	Amount c.c.	Urine.	Total nitrogen.	Stools and amount from feeding.
3	2.92	8.80		11.56	2.19
4	2.92	7.50		9.80	2.19
5	2.92	7.60		10.68	2.19
6	2.92	8.60		10.39	2.19
7	2.92	7.60		9.28	2.19
	14.50	6.50		8.11	10.95
				59.82 10.95	
				70.77	
	Intake			14.50	
	Body loss			56.27 in five days.	

The average loss of total nitrogen by urine and stool in these five cases was 12.9 gm. per day. The average loss in nitrogen from metabolized proteid as shown by the total nitrogen of urine was 11.7 gm. per day.

The largest amount of nitrogen we were able to supply daily by rectal feeding was 3.9 gm., of which 2.06 gm. were returned with stools. According to the observations of Fr. Müller, the stools of individuals taking absolutely no nourishment contains 0.2 gm. per day. With this deduction from our estimations of the return nitrogen we have in no case observed an absorption of more than 50 per cent. of the proteid supplied, and it has fallen as low as 30 per cent. The average amount of nitrogen absorbed in these cases was 1.14 gm. per day.

When we compare the amount of nitrogen lost by these cases with the amount it was possible for them to absorb by colonic feeding, we realize how little we accomplish.

The difference between nutritional enteroclysis and normal salt enteroclysis was a little over one-tenth of the tissue albumin loss per day.

Over the periods of time that rectal feeding is usually carried out it is from practical standpoints an almost negligible quantity.

INTRACRANIAL TELANGIECTASIS: SYMPTOMATOLOGY AND TREATMENT, WITH REPORT OF TWO CASES.¹

By ERNEST SACHS, M.D.,

ASSOCIATE PROFESSOR OF SURGERY, WASHINGTON UNIVERSITY MEDICAL SCHOOL.

OPERATIONS for Jacksonian epilepsy have so frequently resulted in negative findings that I desire to call attention to a group of cases which yields to treatment. This group, though apparently not large, has, nevertheless, a characteristic pathological picture. I shall briefly consider this condition from three points of view: (1) symptomatology; (2) pathology; (3) treatment. This paper is based on two typical cases.

CASE I (Private record).—R. D., a boy, aged ten years, whom I saw in 1909, had, three months after a fall, fever and convulsions confined to the left side of the body, which began in the leg. A complete left-sided paralysis developed, which cleared up in a month. Following this the patient was apparently well and bright at school during the next year; then he began to have monthly convulsions, beginning in the face, with marked irritability; occasional headaches and vomiting; he often started suddenly. Wasser-

¹ Read at the meeting of the American Neurological Association, New York, May 6 to 8, 1915.